

REMARKS

The Examiner is thanked for the due consideration given the application. This amendment is being filed concurrently with a terminal disclaimer. The specification has been amended to improve the language.

Claims 1, 3-9, 17-19 and 21 remain in this application. Claims 1, 3-9, 17-19 have been amended. Claims 2, 10-16 and 20 have been cancelled without prejudice or disclaimer. Claim 1 has been amended to generally incorporate the subject matter of canceled claim 2. Other amendments improve the claim language in a non-narrowing fashion.

Claim 21 is new and finds support in the specification at page 1, line 10 and at page 9, line 14.

No new matter is added to the application by this amendment.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-20 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is respectfully traversed.

The comments in the Official Action have been considered, and the claims have been appropriately amended. The claims are thus clear, definite and have full antecedent basis.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Objection to the Disclosure

The disclosure have been objected to as not having headings.

The comments in the Official Action have been considered, and the specification has been amended to insert headings.

Rejections under 35 U.S.C. § 102(b)

Claims 1 and 4-5 have been rejected under 35 U.S.C. 102(b) as being anticipated by HYODO (US Publication 2003/0148102 AI). Claims 1 and 3-5 have been rejected under 35 U.S.C. 102(b) as being anticipated by CHIEN-SHING et al. (EP 0 942 072 A2). Claims 1 & 3-6 have been rejected under 35 U.S.C. 102(b) as being anticipated by VEERASAMY (WO 01/36342 A2). Claims 11 and 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by AHN et al. (US Publication 2003/0003702). These rejections have been respectfully traversed.

Claim 1 has been amended to generally incorporate the subject matter of canceled claim 2, which was free from these rejections. Claims 11 and 16 have been canceled, thus rendering the rejection of these claims moot. These rejections are thus believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 3 and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over CHIEN-SHING et al. Claim 10 has been rejected under 35 U.S.C. 103(a) as being unpatentable over VEERASAMY, optionally in view of CHIEN-SHING et al. Claims 2, 6-9 and 17-19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over VEERASAMY or CHIEN-SHING et al. in view of KNAPP et al. (US Patent 6,077,569). Claims 12-14 and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over AHN et al. in view of SAINTY (WO 00105742) or KAUFMAN et al. (EP 0265365 A1). Claim 15 has been rejected under 35 U.S.C. 103(a) as being unpatentable over AHN et al. in view of SAINTY or KAUFMAN et al. and KNAPP et al. These rejections have been respectfully traversed.

The present invention pertains to a method of depositing an amorphous layer by adapting an ion gun to eject ions in the form of a beam of accelerated ions created from at least one compound containing fluorine and carbon in gas or saturated vapor form fed to the ion gun. By way of example, Figure 2 is reproduced below.

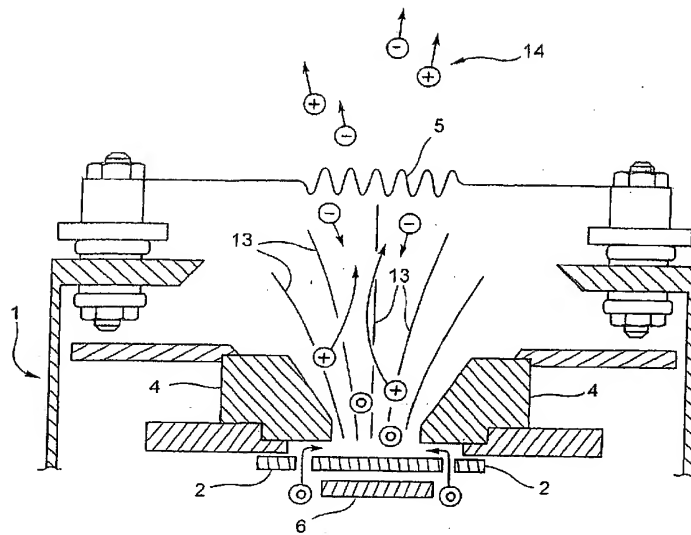


Fig.2

KNAPP et al. set forth a dielectric coating for lenses, such as ophthalmic lenses. For this purpose, an optical substrate, e.g. a lens, is coated on at least one surface by a highly durable and abrasion-resistant dielectric composite product.

At page 12, the Official Action refers to Figure 1, which is reproduced below.

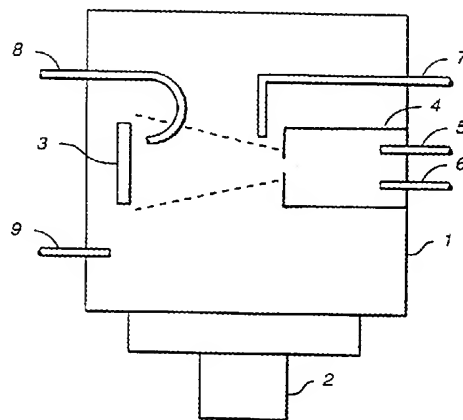


FIG. 1

KNAPP et al. pertains to the multilayer abrasion-resistant dielectric composite comprises a first coating of substantially transparent, highly abrasion-resistant, and a second coating of at least one layer of dielectric material.

This transparent, abrasion-resistant composite coating is comprised of the elements of C, Si, H, O, and possibly N. It is deposited by ion-assisted plasma deposition from mixtures of organosiloxane or organosilazane precursor gases and oxygen to recoller a product coated with the abrasion-resistant material having the properties of nanoindentation hardness in a range of about 2 to about 5 GPa, a strain to microcracking greater than 1.5 % and less than 3.5% and an abrasion resistance greater than or equal to the abrasion resistance of glass, and said dielectric material.

In other words, KNAPP et al. uses specifically selected precursors to obtain very specific properties.

It is also indicated in KNAPP et al. that the dielectric coating material used includes diamond-like carbon (DLC). DLC coating material can be used as a layer within a multilayer coating stack, or can be used as the top or outer layer, in which case the DLC provides additional abrasion protection, chemical resistance, barrier properties and reduced surface friction (column 4, lines 11 to 16).

In the light of those teachings, it would certainly not occur to one of ordinary skill in the art to employ such

anti-reflective coatings on the optical substrates of VEERASAMY or CHIEN-SHING et al. before deposition of their protective amorphous DLC & F containing coatings or to include fluorine in the DLC coatings of KNAPP et al.

Indeed, KNAPP et al. discloses at length that the composite product with its selected elements and DLC coating is suitable on its own as highly durable and abrasion resistant anti-reflective coating.

Therefore, one of ordinary skill in the art would not add fluorine to the DLC coating or a further DLC & F coating.

Far to the contrary, one of ordinary skill in the art would be reluctant to modify the specific composition of the composite coating disclosed by KNAPP et al., which permits to obtain very particular properties,

In addition, as the DLC coating, when used as the top or outer layer provides additional abrasion protection; chemical resistance barrier properties and reduced surface friction (see above, there is no objective reason to add further layer containing fluorine. Far to the contrary, there is a clear motivation to use as a top or outer layer the coating formed only from DLC.

The Official Action also refers to VEERASAMY and CHIEN-SHING.

However, the technical fields of CHIEN-SHING (electronic circuits) and VEERASAMY (automotive and architectural windows) are different from that of the present invention as claimed; i.e. ophthalmic lenses. The technical field of CHIEN-SHING is in this respect particularly far away.

In any case, the aim of VEERASAMY is to provide a durable coated article that can shed or repel water and/or dirt. In other words, its aim is to provide a hydrophobic coating and not an anti-reflection coating.

Furthermore, the addition of fluorine in CHIEN-SHING (see paragraphs [0003], [0004] and [0008]) is linked to the reduction of the effect of the increased resistance and capacitance in integrated circuit applications, whereas in VEERASAMY it is used to further enhance the hydrophobic characteristics of the coating (P. 13, first paragraph). Those features bear no relation with the properties sought by KNAPP et al.

Be that as it may, given the disparities of their subject-matters, the supposed possible combination of the above-mentioned documents is purely arbitrary.

As discussed above, KNAPP et al. do not teach or infer all the elements recited in the instant claims. The other applied references of VEERASAMY, CHIEN-SHING et al., SAINTY, KAUFMAN et al. and AHN et al. also fail to address the

above-described deficiencies of the applied art. A *prima facie* case of unpatentability has thus not been made.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Double Patenting

Claims 1-10 and 17-19 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over copending Application No. 10/569,406, in view of VEERASAMY, optionally considering Chien-Shing et al. This rejection is respectfully traversed.

A Terminal Disclaimer of U.S. Application No. 10/569,406 is being filed concurrent with this paper, thereby obviating this provisional double patenting rejection.

Withdrawal of this provisional double patenting rejection is accordingly respectfully requested.

Conclusion

The objections and rejections have been overcome, obviated or rendered moot, and no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully

requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item:

☒ - a terminal disclaimer